

WHAT IS CLAIMED IS:

1. A motion picture code evaluation apparatus for evaluating an amount of motion picture information after
5 transmission, the apparatus comprising:

a header inspection unit for inspecting a frame header and determining that whether the frame header is abnormal or not to calculate frame loss ratio every predetermined time;

an extracting unit for extracting motion picture coding
10 parameter from the frame header and detecting variation of the motion picture coding parameter in the predetermined time; and

an amount-of-motion-picture-information calculating
unit for summing the motion picture coding parameter and weight,
which is based on the variation of the motion picture coding
15 parameter, to calculate an ideal amount of motion picture information every predetermined time,

wherein an actual amount of motion picture information is calculated by multiplying the ideal amount of motion picture information by $(1 - \text{the frame loss ratio})$.

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2. The apparatus according to claim 1,

wherein the motion picture coding parameter includes number of pixels of motion picture, frame rate, and number of quantization levels; and

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wherein the extracting unit detects a ratio of frames

in which each of the number of pixels, the frame rate, and the number of quantization levels continues to have the same value to the predetermined time.

5 3. The apparatus according to claim 2,
 wherein the number of pixels, the frame rate, and the number of quantization levels, which are included in the frame header determined abnormal, are ignored; and

10 wherein the number of pixels, the frame rate, and the number of quantization levels, which are included in the frame header just before the abnormal frame header, are assumed to continue.

15 4. The apparatus according to claim 2,
 wherein the number of quantization levels is extracted while the number of quantization levels included in a header belonging to a lower layer than the frame is taken into consideration in addition to the number of quantization levels included in the frame header.

20 5. The apparatus according to claim 1, wherein the extracting unit has one of timer and counter, which is reset when the extracting unit extracts the parameter different from the parameter included in the immediately preceding frame
25 header.

6. A motion picture transmission network system comprising:

a motion picture code evaluation apparatus for
5 evaluating an amount of motion picture information after transmission, the apparatus comprising:

a header inspection unit for inspecting a header
and determining that whether the frame header is abnormal
or not to calculate frame loss ratio every predetermined
10 time;

an extracting unit for extracting motion picture
coding parameter from the frame header and detecting
variation of the motion picture coding parameter in the
predetermined time; and

15 an amount-of-motion-picture-information
calculating unit for summing the motion picture coding
parameter and weight based on the variation of the motion
picture coding parameter to calculate an ideal amount
of motion picture information every predetermined time;
20 and

a network management apparatus for managing transmission
of the motion picture code;

wherein an actual amount of motion picture information
is calculated by multiplying the ideal amount of motion picture
25 information by $(1 - \text{the frame loss ratio})$;

wherein the motion picture code evaluation apparatus outputs the frame loss ration to the network management apparatus; and

5 wherein at least one of screen size of the motion picture code, and the chrominance format of the motion picture code, the frame rate, the number of quantization levels is changeable in a transmission source of the motion picture code.

7. An accounting system comprising:

10 a motion picture code evaluation apparatus for evaluating an amount of motion picture information after transmission, the apparatus comprising:

15 a header inspection unit for inspecting a header and determining that whether the frame header is abnormal or not to calculate frame loss ratio every predetermined time;

20 an extracting unit for extracting motion picture coding parameter from the frame header and detecting variation of the motion picture coding parameter in the predetermined time; and

25 an amount-of-motion-picture-information calculating unit for summing the motion picture coding parameter and weight based on the variation of the motion picture coding parameter to calculate an ideal amount of motion picture information every predetermined time;

and

an accounting apparatus for charging for motion picture transmission service

wherein an actual amount of motion picture information
5 is calculated by multiplying the ideal amount of motion picture information by (1 - the frame loss ratio);

wherein the motion picture code evaluation apparatus outputs the actual amount of motion picture information to the accounting apparatus; and

10 wherein the accounting apparatus charges based on quality of received motion picture.